Google



The book that should have been in the box

Sarah Milstein Rael Dornfest SEARCH SECRETS
TO HARNESS
THE WEB'S POWER



Googling Further: Images, News, and the Directory

ormally, when you run a Google search, you're asking Google to look for your search terms on any Web page it has tracked. But the Web can be sliced and diced in many ways, and Google has created a handful of alternative systems for helping you find things.

For example, when you want to find a picture of somebody, you could type in his or her name followed by a few file types used for images, like "Mick Jagger" jpeg gif, and hope for the best. Problem is, Google gives you any site that mentions Mr. Jagger and that has JPEG or GIF files—but not necessarily pictures of the thick-lipped star. You could be drowning in photos of Keith Richards for days before you get any satisfaction. Better to use Google Images, a special search that finds only pictures.

But the fun doesn't end with images. Google News lets you search for and organize news stories. And the Google Directory gives you a way to find information by category rather than keyword. This chapter explains all three features, and the following two chapters cover a few other Google goodies: Groups, Answers, Froogle, and Catalogs. Figure 3-1 shows you where to find all of these services.

Knowing how to use Google's alternative searches can help you tap amazing resources most people overlook.

Google Images

Google's primary search looks for *text* on the Web matching your keywords. But Google also lets you search through a bank of more than 880 million *images* on the Web. Because most pictures have keywords associated with them, you can type in

Google Images

text to find them. (To figure out what a picture contains, Google reads the text on the page around it, the caption if there is one, and other variables, producing surprisingly accurate results.)

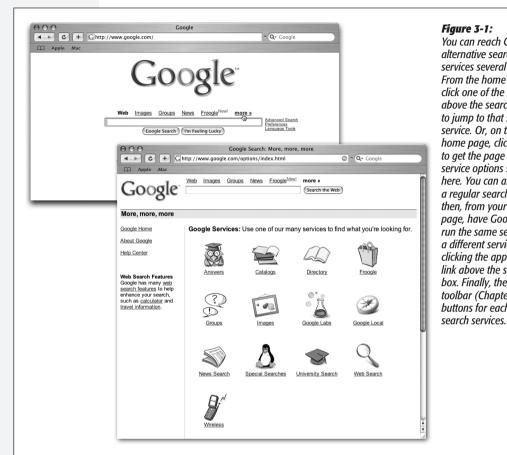


Figure 3-1: You can reach Google's alternative search services several ways. From the home page. click one of the links above the search box to iump to that search service. Or, on the home page, click More to get the page of service options shown here. You can also run a regular search and then, from your results page, have Google run the same search in a different service by clicking the appropriate link above the search box. Finally, the Google toolbar (Chapter 6) has buttons for each of the

The Image Search is terrifically useful when you want to find drawings or photos for use on your Web site, or for inspiration or imitation in your own artwork. It's even a good way to find things like desktop icons, maps, and posters. It can help you figure out if that familiar looking guy on the Stairmaster next to you at the gym actually was Benicio del Toro, and it can show you instantly what a Smart Car looks like. It can also be handy if you're a collector: the objects you're interested in may well be featured in pictures on Web pages. And if you're looking for pictures from recent news stories, Google Images often gives you a row of photos from Google News (page 86). Figure 3-2 shows you how it works.

Note: If you have a Web site with pictures that you don't want Google to find, http://images.google.com/ remove.html#images tells you how to remove the images from Google's orbit.

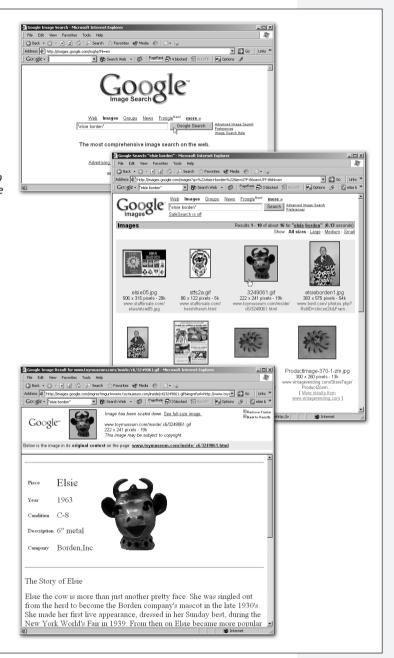
Searching for Images

Searching for pictures is as easy as typing a keyword or two into the blank search box at http://images.google.com and pressing Enter. Image searches are not, however, as reliable as text searches. And, unfortunately, multiword queries tend not to work well

Figure 3-2:

Top: The Google Images search page (http://images.google.com) looks almost identical to the home page. Middle: A search for "Elsie Borden" shows thumbnail pictures of the cow as well as memorabilia in her image. To view an image, click the thumbnail, and Google takes you to a page like the one below.

Bottom: The close-up page has two parts. At top, a larger version of the image floating alone; at bottom, the image on the page where Google found it, so you can see it in context.



Google Images

in Google's Image Search. But single-word queries can give you thousands of results, which is often too many to be useful.

Here are a few tips for finding what you want:

NOTE FROM THE LAWYERS

Using Pictures Legally

Google can legally help you find images on the Web, but its service doesn't give you the right to reuse the pictures. Many—perhaps most—pictures on the Web are protected by copyright, though the way you want to use them can determine whether you need permission.

First, the issue of copyright. If somebody creates a picture, he owns the rights to it. In the same way you can't legally copy text—say, somebody's blog entry on the benefits of synthetic-fiber dog coats—and post it under your own name on your Web site or sell it to The New York Times op-ed page, you can't simply copy their picture of a dog coat and post or sell that, either. While many people believe that they can copy text or images as long as they credit the source or they modify the picture, in many cases that's not true. You need explicit permission to use most material, even if you say who originally created it and even if you alter it.

A major exception to the "look don't touch" rule is artwork that's in the public domain. Public domain means that the work is not protected by intellectual property laws such as copyright and trademark, so anyone can use it without needing permission. An image usually falls into the public domain because its copyright has expired (though the length of a copyright can vary), or because the creator specifically placed the copyright in the public domain. For a clear explanation of when material becomes part of the public domain, see http://fairuse.stanford.edu/.

But even if a picture is copyrighted, the way you use it and the nature of the original material can affect whether you need permission or not. Under the fair use doctrine, you can use part of somebody else's work without permission if your use meets certain criteria. For example, if you download a copyrighted picture of an Appaloosa horse from an encyclopedia, and you display it in a non-profit educational setting like a third-grade classroom, your use without permission would

probably be OK. If you use the same picture for commercial purposes, like pasting it into your travel-agency brochure, you may well be in violation of the copyright.

The tricky thing about fair use is that the criteria are only guidelines. A fair use analysis helps you determine a relative level of risk of infringement, not an absolute answer on whether a particular situation qualifies as fair use. To get your head around the standards of fair use, check out the copyrights section of www.nolo.com.

If you want to use a picture for something other than fair use, and it's not in the public domain, you need permission from the rights holder. And it's important to remember that even if a work appears to be in the public domain, it can still have restrictions associated with it. For example, a 200-year-old portrait of Thomas Jefferson might be in the public domain, but a recent photograph of that painting could be copyrighted—and you might not be able to tell the difference without asking. In addition, just because you can see an image on a site, you can't necessarily tell who owns it, because the Webmaster may not have the legal right to permit others to use the picture, even if she's authorized to use it on her own site.

Google recommends that when you want to copy a picture for some reason other than fair use, you contact the site owner and ask for permission. That's a good place to start. But if the owner doesn't have the authority to grant you permission, you're not off the hook. In the end, it's your responsibility to secure any necessary licenses or permissions. The Stanford and Nolo sites both have excellent discussions of copyright and fair use, and you can also check the government site www.copyright.gov. If you can't figure out whether your intended use is legal, consider contacting a lawyer who specializes in copyright law.

- Keep it short (but not too short). When you can be both brief and specific, you're most likely to get what you want. For example, if you need a drawing of a male Muppet, a search for *Bert* turns up an overwhelming 40,000 results. A search for *Bert Ernie* gets you more than 900 pictures. And *Bert Sesame Street* weighs in at just over 200 images.
- Experiment and be patient. The keywords Google associates with images are not always consistent. Thus, while it's generally a good idea to use very specific search terms, trying out variations can pay off, too—especially when your attempt to be brief and specific, as suggested above, doesn't fly. For example, if *vintage Cadillac convertible* and 1953 El Dorado don't pan out, try 1953 Cadillac convertible or Cadillac El Dorado.
- Try the Advanced Image Search feature. Google's Image Search has its own advanced search page, explained next, that's separate from the advanced page for regular Web searches (page 48). It can help you narrow down a search by file type, size, or coloration (black and white, grayscale, or full color)—a choice that turns out to be particularly meaningful (see page 84 for more on why). And, as explained in the box on the next page, Advanced Image Search lets you change the level of filtering Google uses for your results. Finally, the page guides you through keyword choices and lets you specify a site or domain Google should restrict your image search to.

Tip: Want to see how other people use their digital cameras? The Random Personal Picture Finder (*www. diddly.com/random/*) searches Google Images for pictures taken with some common digital cameras. In the upper right corner of the page, click "Show me some pictures" to see a new batch.

• Use syntax. Google lets you use four syntax elements to focus your image searches. All four are the same ones used in Google's regular Web search (page 60). Keep in mind that because image searches are something of a crapshoot, you'll probably have to fiddle with these syntax elements till you find exactly what you're looking for.

Intitle can be a good way to hone searches because it looks for your keywords in Web page titles, which removes some of the guesswork for Google about what a page contains. Use it like this: *intitle:"taj mahal"*.

Inurl works strangely in Google's Image Search, because when Google records the text on a Web page, it considers certain elements—like JPG extensions—as part of the URL. Thus, if you search the image bank for *inurl:poker*, Google might show you a picture from the URL *www.dogsplayingcards.com/velvet.html* because that page contains a picture called *poker.jpg*. That weirdness aside, *inurl* is like *intitle* in that it can whittle your results from thousands or tens of thousands of images down to a manageable number, like a few hundred.

Filetype is available as a choice in the Advanced Image Search, too, although you can use it to search only for the formats Google keeps track of—JPG, GIF, and PNG. The one trick you've got with this operator that you don't have on the Advanced

Google Images

Image Search page is that you can specify *filtetype:jpeg* or *filetype:jpg*, which gives you different results (the advanced page includes only an option for JPG). Use it like this: "poker chips" filetype:jpg.

Site is also part of the Advanced Image Search, and you can use it to limit your searches to particular sites or domains, which include segments of the Web like .com and .net, and also countries, like .au (Australia) and .fr (France). The site syntax is especially handy when you want to restrict your results to images from Web sites from a certain country, like this: sitcom site:UK, which gives you pictures from British sites. And if you know that something you want to see is somewhere on one large site, use it like this: friends site:nbc.com.

Tip: To find country codes for the Web, look on Google's Language Tools page (www.google.com/language_tools). About halfway down the page, the section labeled Visit Google's Site in Your Local Domain shows you the URLs for dozens of countries. The last two-letter segment of each is the country code.

WORKAROUND WORKSHOP

Too Hot to Handle

The results of an image search have one potentially tricky aspect: what Google delicately calls "mature content." If the Web has revealed nothing else about human nature, it's shown that people can make nearly anything into porn, and then post electronic pictures of it online. Thus, an innocent search for pictures of toasters could turn up a toaster fetish photo. If you're concerned about seeing something objectionable, you can block some such pictures, as explained below, though Google does not guarantee that it will nix them all.

The Image Search has a filter that comes set with moderate filtering on, which means Google tries to exclude most potentially offensive pictures. If you want to ratchet up the filtering to strict mode, in which Google tries to prevent anything questionable from sneaking through, or if you want to turn off the filtering altogether, you can do so on a search-by-search basis, session-by-session, or permanently. Bear in mind that either moderate or strict filtering can restrict your results in undesirable ways, particularly if you're looking for something that could be either legit or seamy, like sex education. If you can deal, it's better to turn the filtering off permanently.

To adjust the filter for an individual search or for a full session of searching (that is, while you still have the browser open),

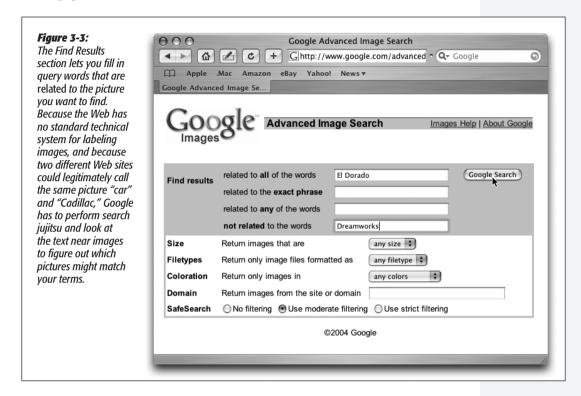
hit the Advanced Image Search page (the Images home page has a link to it on the right side of the screen, and every Images results page has a link to it above the search box at the top of the screen). At the bottom of the Advanced Image Search page, you can choose: No filtering; Use moderate filtering; or Use strict filtering. The setting—which does not affect regular Web searches—holds until you change it, or until you turn off your browser and turn it back on, at which point Google reverts to moderate filtering for images.

If you want to set the filtering to hold from one browser session to the next, you can adjust the mode in your Google preference settings under SafeSearch Filtering (www.google.com/preferences). Choose the level you'd like, and then click Save Preferences. In this case, the filtering applies not only to pictures but to regular Web searches, too.

The results page for every image search includes a link above the thumbnails telling you what level of filtering you have set. If you click the link, Google takes you to your general preferences page, where you can change the setting. Remember that by changing the global preference you not only keep the change in place after you've turned off your browser, but you also change the setting for all types of Google searches.

Advanced Image Search

You can get to the Advanced Image Search via the Images main page, which has a link to it on the right side of the screen. Alternatively, every Images results page has a link to it above the search box at the top of the screen. Figure 3-3 shows the advanced search page.



The Advanced Image Search has six elements you can tweak. SafeSearch is explained in the box on the previous page; the others are:

- Find Results. This section is where you type in your keywords. You can use all or any of the four search types, which work as follows: "Related to all of the words" means Google looks for every word or phrase you ask for, but not necessarily in order. This option works nicely when you don't care whether a picture is of a 1953 Cadillac or simply a picture of a Cadillac taken in 1953.
 - "Related to the exact phrase" is like putting quote marks around your terms and means Google looks for all your words and only in the order you type them in. If you typed 1953 Cadillac here, you'd most likely only get pictures of 1953 Cadillacs.
- "Related to any of the words" means Google shows you pictures that are near at least one of your words, but not necessarily all of them. This search gives you 1953 Cadillacs, but also Cadillacs from other years, and pictures of other things from 1953 or taken in 1953.

Google Images

"Not related to the words" leaves out pictures that are near the words you type in here. For this search to work, however, you have to have some keywords in one of the other boxes in Find Results. For example, if you want pictures of a vintage El Dorado, but you're not interested in the Dreamworks movie *El Dorado*, try typing *Cadillac El Dorado* in either of the first two boxes, and type *Dreamworks* in this one. Google gives you lots of pictures of cars and excludes cartoon stills from the movie.

Tip: This feature is also great if you're phobic of, say, snakes and you're searching for feather boas. Type *snakes* into the "Not related to the words" search box to prevent Google from showing you serpent pictures by accident.

• Size. People measure electronic images in two ways: by *dimension* (which can be in inches, centimeters, pixels, and so on) and by the amount of space a picture takes up on your hard drive, usually expressed in *kilobits*. Google lets you narrow down your results to include only images with rough dimensions, measured in pixels. (Google also tells you how big a file is in kilobits, but it doesn't let you search for this factor.)

Dimension matters in a few cases. First, if you're accessing the Internet over a dial-up connection, image searching can be slooooow. While dimensions are no guarantee of weight in kilobits, smaller pictures are often made up of less data and therefore load faster. Second, some things, like maps and posters, tend to show up in larger dimensions. And if you're specifically looking for pictures to use on your desktop icons or to fill a space of a certain size on your Web site, this feature can help you hit pay dirt.

Google has three sizes to choose from—small (about 100×100 pixels), medium (around 200×200 pixels), and large (everything else). You can simply pick the one you want from the menu. Like all elements that narrow down an image search, picking a certain size can lead to maddeningly few or sometimes no results, so it's best to stay flexible when you can.

- File types. Google keeps track of files in three formats: JPG, GIF, and PNG. It's best to leave this setting at "any filetype" since choosing one eliminates lots of results. But, obviously, if you need a certain file type and you don't have access to a graphics program that can convert images, this feature is crucial for successful searching.
- Coloration. Your choices here—black and white, grayscale, or full color—can produce wildly different results. Black-and-white images tend to include diagrams, charts, line drawings, symbols (like the outline of a woman from a restroom door), cartoons, sheet music, and maps. Sometimes photos show up in a black-and-white search, and sometimes they don't. Grayscale searches, however, often produce photos as well as drawings of various kinds. And full-color searches usually give you primarily photos, followed by cartoons and other drawings.

In addition to helping you find different kinds of pictures, the coloration feature can be a boon to dial-up searchers. Both grayscale and black-and-white pictures are often much, much leaner than color pictures and thus load significantly faster.

• Domain. If you know the picture you want is on a particular Web site, you can use the domain feature to limit Google to that site. For example, if you want to see official pictures of Microsoft's Windows logo, try windows as your keyword, and then in the domain box, type www.microsoft.com.

Of course, you can also use the domain feature to tell Google you'd like to search only in one country, like .de (Germany) or .sp (Spain), or in a particular segment of the Web, like .edu, .org, or .com. This option is handy when, for example, you're looking for things to buy (try limiting your search to the .com domain). Want to find computer science syllabuses? Try looking only in .edu.

Reading Your Images Results

It's pretty easy to figure out how to navigate through a page of image results. You get a bunch of thumbnail-sized pictures, you click one you want to see, and Google shows you a larger picture of the image and the page it came from. But the image results have a few nooks and crannies you might miss. Figure 3-4 shows you what to look out for.

Tip: If you have a broadband Internet connection and a fairly large screen, image results are usually easiest to flip through if you've got about 20 or 30 on a page, rather than the 10 it comes set to. From the preference page (www.google.com/preferences), you can change the number of results Google shows you for every search. Once you've made the change, Google saves that setting unless you change it again.

WORKAROUND WORKSHOP

Zooming In and Out

Most of the time, browsers don't let you zoom in and out on images. But you might want to see the details of a picture up close, or pull back to view the whole thing, especially in pictures with large dimensions. Or you might just want to see what a picture looks like at a different size. The secret is the Print Preview feature, which opens a new window with your current Web page, and lets you zoom in and out. This trick works equally well in nearly all browsers, though it's hit-or-miss in Internet Explorer for the Mac.

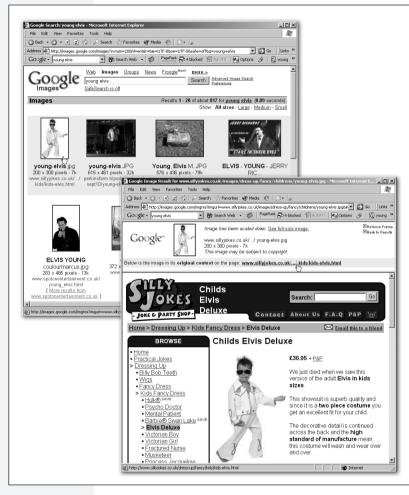
The first step is to isolate the image you want to see on a page of its own, so you can zoom in and out on the picture only and not the rest of the gunk on the page. If you're looking at a picture on its native Web page, or as a thumbnail on a Google image search results page, right click it (Control-click

on the Mac) to pull up a shortcut menu, and then select something like View Image or Open Image in New Window or Open Link in New Window or View Link in New Tab. (If you found your picture through a Google image search and clicked the thumbnail on the results page to get the two-part page shown in Figure 3-4, simply click "See full-size image" to open the picture on its own page.)

Once you've got the picture separated out, you can open it in Print Preview. In most browsers, you can find Print Preview in the File menu; in Safari, you first have to select File→Print, and then in the dialog box that opens, click Preview. In Print Preview, look for buttons to zoom in and out, or for a menu that lets you change the scale of an image. Mess with the size to your heart's content.

Google News

Most of Google's services help you find things on the Web only when you ask for them. Google News (http://news.google.com/) does the opposite: it goes out and finds news stories throughout the day, continuously updating its news page (Figure 3-5),



Fiaure 3-4:

Top: Below each picture is its name and file type (JPG, GIF. or PNG), followed by its dimensions in pixels and its size in kilobits. Under that is the URL for the page where Gooale found the picture. And if Google knows that a site contains more pictures that miaht match your keywords, it includes a link for "More results from www. whatever.com." as vou can see under the first image in the second row: click the link to get another page of results.

Bottom: When you click a picture, Google shows you a page like this, which has your image isolated at the top, and below that, the page where Google found it. If you click the URL between the two parts of the page, or Remove Frame in the upper right corner, Google displays the Web page alone. If you click the image or "See full-size image," Google shows you the picture alone.

or even sending you email as stories develop. Google culls articles from more than 4,500 online news sources, and then presents them by topic ("Fans, Industry Mourn Johnny Cash") and by category (Entertainment).

Unlike other news services, Google News uses sophisticated computer algorithms, rather than sophisticated humans, to group and categorize stories. The advantage to this system is that Google can gather a lot more stories a lot faster than most news aggregation services. In addition, because people aren't involved, the service isn't influenced by politics or ideology, so you get a range of viewpoints on most stories.

The disadvantage is that sometimes, those computerized editors misunderstand things and post a story about, say, the Gaza Strip in Entertainment.

Note: Google considers the news service to be a *beta* offering, which means the company does not guarantee that it's ready for prime time. In practice, this means very little for you. Google News works so consistently, you may never notice any glitches.

Figure 3-5:
Google organizes
news stories into eight
categories: Top Stories,
World, U.S., Business,
Sci/Tech, Sports, Entertainment, and Health.
The first section of the
page has a smattering
of top stories, but if you
scroll down, you can
find three recent stories

in each category, plus

three more top stories

at the very bottom of

the page.



ALTERNATE REALITIES

News Sites of Note

If you're a news junkie, Google News might not give you a big enough fix. Fortunately, the Web is crammed with news sites.

A good place to start is Yahoo Daily News (http://dailynews. yahoo.com), a thorough, well-organized directory with links to tons of stories and other news sites. You can also search for stories or news photos. And don't miss the "Oddly Enough" link to irresistibly weird stories, like "Thieves Return Cranky Alligator" and "She Closed Airport to Avoid Vacation with

Boyfriend."

For localized searches, Topix (www.topix.net) cannot be beat. It's also an excellent all-around news aggregator, with terrific category breakdowns covering zillions of topics (including Google).

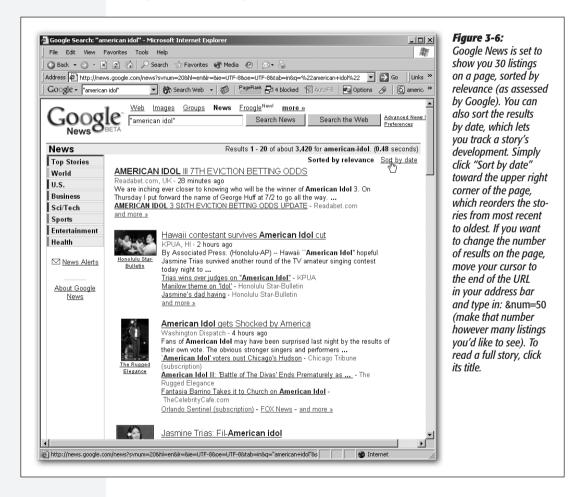
To search for news coverage on blogs or regular Web pages, Daypop (www.daypop.com) is a good bet. It also keeps running tabs on the words that appear most frequently in the news.

Google News

Google News is great for learning about breaking news, for comparing the way different news organizations cover the same story, or for seeing how a story has developed over the past month (the service archives stories for 30 days). You can also run a keyword search in Google, described below.

Searching Google News

You can run a search in Google News just the way you would run any regular Google search of the Web. If you type your terms into the blank search box at the top of any Google News page and press Enter, Google gives you a list that looks like the results in Figure 3-6, including results up to a month old.



If you find yourself with tons of irrelevant results, you can take two courses of action to narrow things down. Either use the advanced search feature described in the next section, or use one of these two syntax elements:

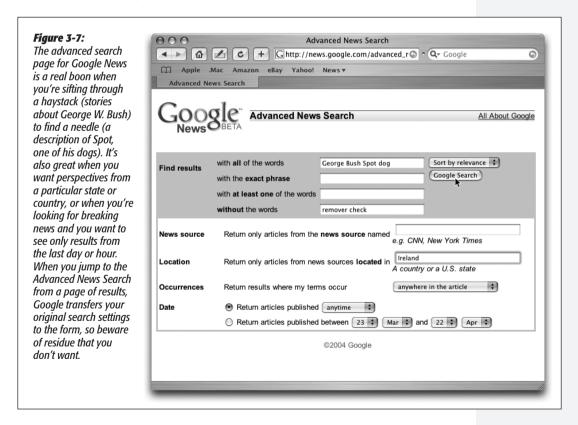
- Intitle searches for your words in the article title. Use it like this: *intitle:"presidential hopeful"*.
- Source restricts your results to stories from one news outlet, like the *Washington Post* or CNN. If your source has more than one word in its title, you have to use underscores to link them together, not quote marks, like this: *SpongeBob source: newark_star_ledger*.

Maddeningly, Google does not publish a list of the 4,500 sources it gathers stories from, so you have cull sources from existing stories or do some guessing (if *source: times* doesn't work, try *source:new york times*).

Advanced News Search

When you want to limit your keywords or home in on results from a particular time-frame or location, the Advanced News Search page, shown in Figure 3-7, is the place to head to. Oddly, there's no link to it on the main news page. You either have to point your browser to http://news.google.com/advanced_news_search, or you can jump to it from the About Google News page—which is linked on Google News.

Here are the elements you can fine-tune with the Advanced News Search:



Google News

- Find results. As in the regular advanced search (described on page 48), this section gives you four ways to specify the keywords you'd like Google to search for. If you want it to exclude something by filling in the last box ("without the words"), you also have to fill in one or more of the first three boxes. Exclusion is one of the strongest tools you have at your disposal, letting you search, for instance, for "Art Garfunkel" without "Paul Simon". This section also includes a menu that lets you select whether Google shows you results listed by relevance or by date.
- News source. Like the *source* operator, this option lets you tell Google which news outlet you'd like results from. To use this feature, you also have to fill in at least one of the keyword boxes; you can't simply say you'd like to see stories from, say, Al Jazeera for the past week without giving Google some search terms, too.
- Location. When you're searching for articles on potatoes, here's the place to tell Google that you want stories only from news sources in Idaho. This is also a handy feature if you're trying to track events in other countries, like soccer matches in Spain, that aren't likely to be covered by U.S. sources.
- Occurrences. This menu gives you the choice to search for your keywords anywhere in an article, in the headline only, in the body text only, or in the URL only. This feature is useful when you're searching for something that simply gives you too many results and you want to weed out a few thousand. Use the headline or URL options when you have a sense that your topic may be the main idea in a story (Ozzy Osbourne injured); limit your search to the body text if you want something offbeat (fifth place in British pop charts).
- Date. In this section, a menu lets you choose to see articles from the last hour, day, week, or month. Alternatively, you can specify stories from a single date or range of days during the last month. Unfortunately the Google News archive goes back only 30 days.

Tip: To see stories from only one day in the past, choose the same start and end date.

This feature is seriously great, because a normal Google Web search lets you narrow your results down only by the day on which Google last recorded the page, or possibly on the day a page was last changed—neither of which is very useful for most searches. Here you can see what Tiger Woods has won since the beginning of the month, what Justin Timberlake was doing on New Year's Day, or get the very latest on the return of AbFab.

Browsing Google News

To browse through recent stories, you can simply scroll down the main page to see the top three stories in each category. Or you can click the colored links on the left to jump to a full page of stories for each category.

Tip: If you have a dial-up connection, you can speed up the delivery of Google News considerably by viewing the service without photos. On the left side of the page, click Text Version. To return to the version with photos, click Graphical Version near the top of the page.

Google helpfully clusters stories together by topic. An individual story consists of a headline you can click to go to the original site (if that site requires registration, Google makes note); the first paragraph of the story; links for related headlines from several other news sources; links to other sources that have covered the story; and a link for a listing of related stories, which takes you to a page of results like that shown in Figure 3-6.

Tip: How fresh is the news Google is feeding you? There are two ways to tell: 1) Toward the top of the page, under the search buttons, is a note, "Auto-generated 4 minutes ago," or however recently Google updated the page (usually very recently); and 2) each story tells you when its native Web site posted it.

If you want your news from sources based primarily in another country, or in another language, Google News comes in nine other flavors: Australian, Canadian, French, German, Indian, Italian, New Zealander, Spanish, or United Kingdom-ish. The links for the international versions are at the bottom of the main page.

Getting the News Delivered

Browsing and searching for stories is all well and good if you're serving ten years to life. But if you're too busy to click around Google News looking for breaking stories all the time, you can have Google email you updates, either as they appear or once a day, as a digest. As Google points out on the sign-up page, alerts are great for keeping track of a business competitor's activity or action in your industry generally; watching a news story develop; and keeping up to speed on your favorite sports teams and celebrities.

Tip: You can also use news alerts to keep track of *yourself* in the news. To see who's saying what about you, sign up for alerts that let you know when Google's found news mentioning or featuring you.

Signing up is a cinch. On the left side of the main news page, click the link for News Alerts to get the page shown in Figure 3-8.

The keywords you choose for your alerts can have a big effect on the stories Google sends you. For example, if you live in Salt Lake City, and you're a big basketball fan, signing up for alerts with the keyword *Jazz* is also going to get you stories about Louis Armstrong's house in Queens and the new Lincoln Center auditorium. For better results, try *Utah Jazz*.

Tip: You can create a pretty complex query using the Advanced News Search page, described above, and then transfer that query to a news alert. Simply set up an advanced search, and run it. Then, at the top of the results page, copy all the words that appear in the search box, and then paste them into the blank box in a fresh news alert setup page. Complete the alert as usual. Simple as that.

If you sign up to get alerts as they happen, you can wind up with a ton of email in a short period of time if your topic heats up. If the onslaught is overwhelming, consider creating a separate folder in your email program for messages from Google News and using message rules (which nearly all email programs have) to automatically file

Google News

incoming alerts in that folder. Your other alternative is to shut off the flow entirely: Each alert you receive has a handy cancellation link at the bottom; click it to instantly kill that stream of messages.

Unfortunately, you can't edit the settings on your alerts once you've set them up. So if you want to change your keywords, the frequency of news delivery, or your email address, you have to cancel your current alerts and sign up again.

Note: In addition to news alerts, Google lets you sign up for *Web* alerts, which tell you when Google finds a page that mentions your terms. Web alerts are great for tracking comments other people make about you, your company, your competitors, your sister-in-law, and so on. You can also use them to discover new pages on a topic, or to find out when somebody has linked to your site (use the link syntax like this: *link: www.fyour website's name here].com*).

Head over to *www.google.com/webalerts* and fill in the form, specifying whether you want to receive the alerts daily or weekly. If you want to create an elaborate query, fill out the Advanced Search form, run your search, and then—from the results page—copy the text that appears in the search box and paste it into the search line of the Web Alerts form.

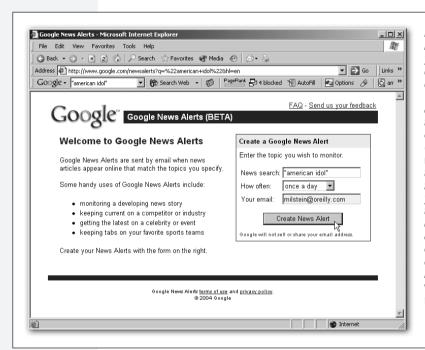


Figure 3-8:

In "News search." fill out your keywords. In "How often," select "once a day" or "as it happens." And in "Your email," type in the address where vou'd like to receive the alerts. Then click Create News Alert. Google sends you an email with a link to click verifyina that you want to sign up for the alert. Click it and vou're done. (Gooale savs that it does not sell email addresses or use them for any purpose other than the one you designate—in this case, receiving news alerts. For more information, see www.google.com/help/fag newsalerts.html#q11.)

Google Directory

When you run a good old-fashioned Google Web search, Google checks its massive index of Web pages and shows you every single one that has your search terms on it. That index, described on page 2, is created by software that regularly combs the

Web and records everything it finds; no humans judge or categorize the pages. The index system is great when you're searching the Web for something specific—like the name of the 1983 Wimbledon women's champ and how many unforced errors she made that year.

But when you want to learn about something more general, like tennis, or you want to find out what kind of Web sites exist for a particular topic, like skincare tips, an index-based Web search can't give you an *overview*. You could, of course, type *tennis* or *skincare* into the Google search box in order to get a few thousand pages that mention those terms. The Google Directory (*www.directory.google.com*), however, can give you a handy survey of your desired topic.

Figure 3-9: First: Looking for diet help? Start at the Google Directory and try Health.

Second: The health category, with subcategories at the top (the most popular are bolded) and relevant Web sites at the bottom.

Third: The weight loss subcategory, which has sub-subcategories and a listing of relevant sites. Click the link for support groups to jump that sub-sub-subcategory, which probably has Web sites that meet your needs. If not, you can delve even deeper into the categories.



Google Directory

Note: A directory is sometimes called a *searchable subject index* because they let you browse for pages by subject rather than by keywords.

The Google Directory organizes 1.5 million Web sites into categories by topic, like an encyclopedia. Beginning with 16 main categories—ranging from Arts to World—the Directory includes subcategories and sub-subcategories and sub-subcategories, with a list of related Web pages at every level. Figure 3-9 shows you how it works.

Note: The World category contains sites in languages other than English, and the listings *themselves* are in other languages, too.

Unlike Google's main index of Web pages, which is created by software, the Google Directory is created by people—who decide what the categories are and which sites go into them. (For more on how the Google Directory is maintained, see the box on the next page.) As a result, pages usually wind up in categories directly related to their main topic, rather than in categories related to something they merely mention.

When to Use the Directory

Because directories often miss the details of Web sites' content, and because they rely on human judgment, people sometimes overlook their value. But you don't need to make that mistake. Here are the best reasons to use a directory:

- Big picture. Directories excel at showing you the lay of the land for any given topic. Using one is like looking at a road map for a whole state rather than just one town. For example, if you want to find information on ecotourism, follow the links in the Google Directory for Recreation—Travel—Specialty Travel—Ecotourism. This page lists a few dozen top ecotourism sites and subcategories for associations; birding; dolphins, manatees, and whales; fall foliage; and regional. And because each subcategory tells you how many sites it contains, you can also get a sense of the scope of a topic.
- Narrowing down a search. Directories are great guides when you want to search within a broad category but you don't know what direction to head in. For instance, if you want to take a vacation, but you're not sure what kind of trip would be fun or even what kind of trip would be possible, the Travel page of the Google Directory suggests about a dozen ways to think about your vacation—and each of those categories has subcategories and so on.
- How do other people think about something? Because directories are organized by people, they can give you a good sense of how others approach a topic—a useful way to *broaden* your thinking. For instance, if you want to write for television but you're not sure what kinds of shows you'd like to pitch, take a look at the Google Directory page for Arts—Television—Programs, which lists 30 thought-provoking genres.
- Related topics and search terms. Because directories list many topics connected to a category, they can tip you off to related ideas and search words you might not

have thought of. For example, say you have friends coming in from Melbourne and you want to make them feel at home without renting a herd of kangaroos. So you decide to learn about Australian Rules Football. You head to the Google Directory and follow the links in succession for Sports > Football > Australian Rules, and you find subcategories for things like teams, officiating, and something called "tipping," and related categories for info on Australian sports and International football. If you'd done a regular Web search, you might never have discovered tipping (which is a synonym for predicting, as you would in an office betting pool), or that Australia and Ireland have a longstanding competition in a game that combines the rules of Australian and Gaelic football.

- Searching within a category. The Google Directory has a blank search box that lets you search for keywords within any category or subcategory. For example, if you want to look up studies that discuss the way people use the mouse to interact with their computers, but you don't want any results about rodents, you could search for *mouse* within the Computers—>Hardware subcategory. For studies of the way live mice react to eating a lipstick a day for three years, search for *mouse* within the Science category.
- Human intervention. Google's normal Web search shows you pages that a sophisticated algorithm deems most relevant. And most of the time, it comes through. But if you'd like the human touch, too, the Google Directory gives you the best of both worlds. People choose the sites that it includes (see box below), and then Google applies its PageRank technology to the directory listings. So you see not only sites that an editor has deemed worthy, but Google presents them in order of importance, based on its ranking algorithm.

Tip: Because directories are designed by people, each one has different categories and unique ways of organizing information. When you want to use a directory, try more than one to get a few perspectives. Yahoo and Google are good places to start.

UP TO SPEED

Where Google's Directory Listings Come From

Because directories rely on people to review and categorize Web sites, they are seriously labor-intensive to create. Rather than employ hundreds of staffers to develop its directory, Google uses listings from the Open Directory Project (http://dmoz.org), which is edited and maintained by a cadre of thousands of volunteers—much the way open-source software is developed.

The Open Directory contains about 1.5 million URLs, and the sites in it are purely the choice of editors—you can't pay to have your site included. (If you want them to consider

your site, head over to http://dmoz.org/add.html.) So it's important to remember that when you're using Google's Directory, you're browsing through a much smaller collection of Web pages than you get using Google's regular Web search tool.

The Open Directory Project offers listings only. Search services like Google, Lycos, HotBot, and others provide the actual search mechanism you can use to find things within the directory.

Google Directory

Browsing the Directory

Like Google Groups and News, the Directory is set up so that you can browse through the categories from the main Directory page. Just click a link, and you're off to that category—which gives you more categories you can investigate (Figure 3-10), and so on, until you hit the bottom level, which has no subcategories, just page listings.

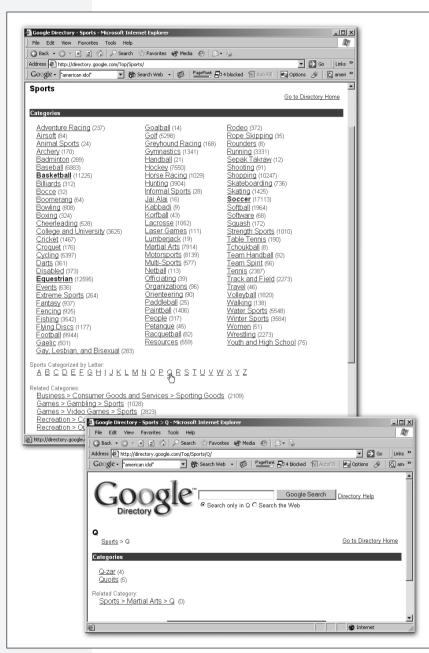


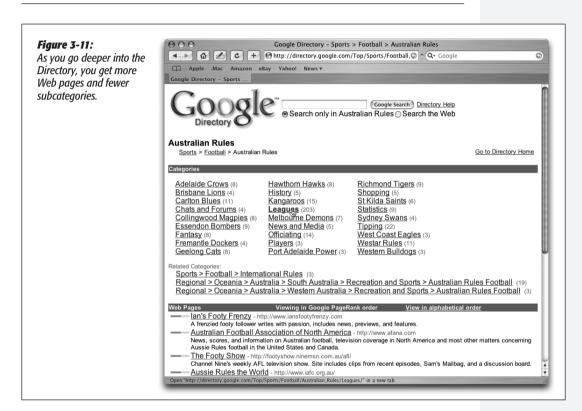
Figure 3-10:

Top: In the list of categories, the number after each link tells you how many sites or subcategories the Directory lists under that subject. Below that, a list of Related Categories indicates that other Directory categories also include sites that cover the current topic. Click a link to jump to a different category.

Bottom: If a category has too many subcategories to display at once, Google instead gives you a list of the alphabet; each letter links to subcategories starting with that letter. Here, the Sports category didn't explicitly list any "Q" sports, but clicking the letter "Q" on that page brings you to this handy listing.

When you drill down as described in Figure 3-11, the top of every Directory results page offers a handy path showing where you currently are within the Directory (for example, Sports—Football—Australian Rules). If you click any of the links in the path, Google takes you directly to that Directory page, making it easy to navigate around.

Note: Most of the time, Web sites listed in the Directory come with a useful description of what you'll find on that site. Open Directory volunteers write those notes, so the quality of information in them varies from category to category.



The bottom half of a Directory results page lists Web sites that fall under the current category. Google applies its PageRank system to the Directory search results, listing the Web sites in order from highest rank to lowest. The green bar to the left of each Web site gives you a sense of how high Google's algorithm ranks that site overall (see page 3 for more on how PageRank works). If you want to see the sites listed alphabetically instead, simply click "View in alphabetical order."

Tip: If you want to return to the main Directory page, click the Google logo in the upper-left corner of every Directory page.

Searching the Directory

When you want to home in on something, and there's no obvious place on the main Directory page to look for your subject, or when you want to find out which categories

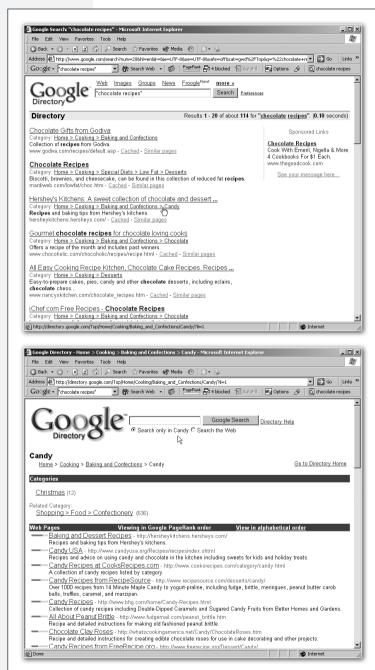


Figure 3-12:

Top: you can type your keywords into the blank search box to get a results page that includes a category path in each listing. Here, a search for "chocolate recipes" shows that results can appear in several categories.

Bottom: Click a category path to find yourself on a tidily arranged page offering recipes of many kinds. The search box at the top of the page lets you search within that category only. If you select Search the Web, Google runs a regular search; to return to the Directory home page, click the logo to the left of the search box.

include your search terms, it's time to run a *keyword search*. You can do so from the Directory home page or from any level of the Directory. When you run a query in the Directory, your results look similar to regular Google listings (Figure 3-12), but they include only sites in the Directory, and each listing shows the category where you can find that Web page. Click a category path to jump to that Directory page and see more related sites.

Note: A Directory search for "*chocolate recipes*" gets you around 130 results. A regular Google search gets you more than 95,000. While it might seem like the Directory limits you, more likely it's helping you find the 130 or so best sites. And be realistic: You're not likely to sift through all 130 sites—let alone 95,000 or more.

The Google Directory has no advanced search page, but you can use two syntax elements to refine your searches: *intitle* and *inurl*, both of which help you narrow down results to pages that really focus on your keywords. See page 60 for more on syntax.